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Implementation of a Two-Phase SSBI-PR at DSS: An Evaluation with Recommendations

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Defense Personnel Security Research Center

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Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Defense Personnel Security Research Center or the Department of Defense.

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14. ABSTRACT <p>The Defense Personnel Security Research Center has conducted a series of studies aimed at improving the use of investigative resources. Following research that showed that investigative sources differ substantially in terms of their ability to yield issue-relevant information, a new reinvestigation model was developed and tested—a two-phase SSBI-PR. In a two-phase periodic reinvestigation, Phase 2 sources (developed and listed references, residence interviews, and residence records) are used only in cases in which Phase 1 sources (all other sources) yield issue-relevant information. Findings of the initial phasing study, and subsequent research, showed that phasing saves substantial resources with very little loss of derogatory information. In the summer of 2002, the Deputy Assistant Secretary of Defense (Security and Information Operations), with the support of the Intelligence Community, approved implementation of a phased SSBI-PR for a 1-year test period. In October of FY03, the Defense Security Service (DSS) implemented phasing. This study documents the findings of an evaluation of phasing as implemented by DSS. Similar to findings of previous phasing studies, results of this evaluation show that the most productive sources can be used to identify SSBI-PRs where the least productive sources are most likely to yield derogatory information—that it is unnecessary and not cost-effective to use the least productive sources in all SSBI-PRs. Findings of this study suggest that whatever the cost of conducting the 15,668 periodic reinvestigations in FY03 would have been without the implementation of a phased SSBI-PR, in implementing phasing, DSS reduced these resource requirements by approximately 22%.</p>					
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Preface

In 2001, research was undertaken to assess the amount and type of derogatory information yielded by sources used in Single-Scope Background Investigations—Periodic Reinvestigations (SSBI-PRs). Analyses showed that some sources used in periodic reinvestigations are far more productive than others and that the most productive sources can be used to identify cases in which less productive sources are most likely to yield derogatory information.

Building upon these research findings, PERSEREC conducted a follow-up study to assess the feasibility of a two-phase periodic reinvestigation. In a two-phase SSBI-PR, Phase 2 sources are used only in cases in which Phase 1 sources yield derogatory information, thereby suggesting that further investigation is warranted. Phasing was shown to save substantial resources with minimal loss of derogatory information. Additional phasing research conducted by PERSEREC and other organizations supported the viability of phasing.

This report presents the results of an evaluation of a 1-year implementation of a phased SSBI-PR by the Defense Security Service (DSS). Findings of this study indicate that phasing results in a significant reduction in resource requirements with very little loss of derogatory information. Taken together, findings of phasing research conducted by PERSEREC suggest that the investigative standards for conducting background investigations should be changed such that a two-phase SSBI-PR becomes the new minimum requirement for conducting periodic reinvestigations.

James A. Riedel
Director

Executive Summary

Research conducted by the Defense Personnel Security Research Center (PERSEREC) has shown that a two-phase Single-Scope Background Investigation-Periodic Reinvestigation (SSBI-PR) results in a more effective use of investigative resources. In a two-phase periodic reinvestigation, not all sources are exploited in all cases. Phase 2 sources (listed and developed references, residence interviews, and residence records) are used only when “issue-relevant information” is yielded by one or more Phase 1 sources (all other sources in the SSBI-PR). Issue-relevant information is information that is relevant to establishing an issue of potential current security concern.

In the summer of 2002, the Deputy Assistant Secretary of Defense (Security and Information Operations), in conjunction with the Intelligence Community, approved a 1-year test implementation of the phased SSBI-PR. In FY03, the Defense Security Service (DSS) implemented the phased periodic reinvestigation. To assess the performance of the phased SSBI-PR as implemented by DSS, the current evaluation study was undertaken.

Data Used in This Study

In FY03 DSS conducted 15,668 SSBI-PRs under the phasing model. From a subset of these cases (SSBI-PRs that closed between October 1, 2002 and March 31, 2003), DSS selected a random sample of 391 Phase 1 SSBI-PRs. DSS reopened these Phase 1 cases and conducted Phase 2 sources for them so PERSEREC could determine whether Phase 2 leads would have yielded issue-relevant information if they had been used initially. (Because these cases were designated as Phase 1 by DSS, Phase 2 sources would not normally have been included.) DSS also provided PERSEREC with a convenience sample of 214 Phase 2 SSBI-PRs—cases in which both Phase 1 and Phase 2 sources were included in the investigation prior to its close.

Evaluation Criteria

We evaluated the performance of phasing using five outcome measures. We compared the proportion of SSBI-PRs that DSS expanded with the rate of case expansion found in previous studies. We determined the percentage of Phase 1 SSBI-PRs (cases DSS designated as Phase 1) in which Phase 2 sources would have yielded issue-relevant information if they had been used. (Because these sources would not normally have been included, the information they yielded would have been missed.) We calculated our evaluators’ level of agreement with DSS’ Phase 1 designation and we calculated our evaluators’ level of agreement with DSS’ Phase 2 designation. (Our evaluators had extensive experience conducting background and counterintelligence investigations and were trained in the application of phasing expansion criteria.) Finally, we estimated the reduction in resource requirements that resulted from DSS’ implementation of phasing.

Key Findings

Using the entire population of SSBI-PRs conducted under the phasing model in FY03 (N=15,668), we determined the proportion of SSBI-PRs that DSS expanded to include Phase 2 sources, and compared this expansion rate with that found in prior research.

- Using the expansion criterion of issue-relevant information in one or more Phase 1 sources, 2,341 of the 15,668 SSBI-PRs conducted by DSS under the phasing model were designated as Phase 2 investigations constituting an expansion rate of 15%. Conversely, 85% of the SSBI-PRs subject to phasing were deemed by DSS investigators to contain no issue-relevant information in Phase 1 sources and were not expanded to include Phase 2 sources.
- Our evaluators would have expanded 16% of SSBI-PRs in comparison with DSS' expansion rate of 15%.
- Both the DSS expansion rate of 15% and our evaluators' expansion rate of 16% are lower than that shown in prior research in which 23% of DoD SSBI-PRs were deemed to contain issue-relevant information in one or more Phase 1 sources.

For the sample of Phase 1 investigations included in our evaluation (n=391), DSS conducted Phase 2 leads after the investigations closed so PERSEREC could determine the information that was missed by not using these sources.

- In 387 of these 391 SSBI-PRs, Phase 2 sources yielded no issue-relevant information.
- In four of these 391 SSBI-PRs, Phase 2 sources would have yielded issue-relevant information.
- The four “missed” SSBI-PRs were examined and the issue-relevant information that was yielded by Phase 2 sources was found to be relatively minor. The information yielded by Phase 2 sources in the missed SSBI-PRs is described in the body of this report.

Our evaluators reviewed Phase 1 sources in the sample of Phase 1 investigations included in our evaluation (n=391) to determine whether they felt these sources yielded issue-relevant information and hence, whether any of these cases should have been expanded.

- Of the 391 SSBI-PRs that DSS designated as Phase 1, our evaluators agreed that 370 should not have been expanded but believed that 21 should have been expanded to include Phase 2 sources. Thus, our evaluators agreed with DSS' Phase 1 designation 95% of the time.

- In expanding an additional 21 SSBI-PRs, our evaluators would have expanded three of the four SSBI-PRs that DSS did not expand in which Phase 2 sources would have been productive.

Our evaluators reviewed Phase 1 sources in the sample of Phase 2 investigations (n=214) to determine whether these sources yielded issue-relevant information and, hence, whether these cases should have been expanded.

- Of the 214 SSBI-PRs that DSS designated as Phase 2, our evaluators agreed that 172 should have been expanded but believed that 42 should not have been expanded to include Phase 2 sources. Our evaluators agreed with DSS' Phase 2 designation 80% of the time.
- In deciding against the expansion of 42 SSBI-PRs that DSS expanded, our evaluators would have increased the number of missed cases by one SSBI-PR. If our evaluators had made the phasing decision, they would not have expanded one SSBI-PR that DSS expanded in which Phase 2 sources yielded issue-relevant information.

Using data gathered for a cost study conducted by DSS, data gathered for the initial phasing study, and recent analyses conducted to measure SSBI-PR time requirements, we estimated the reduction in resource requirements that resulted from DSS' implementation of a two-phase SSBI-PR in FY03. Our analyses showed that whatever the cost of conducting the 15,668 periodic reinvestigations in FY03 would have been without the implementation of phasing, in implementing a phased SSBI-PR, DSS reduced these resource requirements by approximately 22%.

Findings of this evaluation study support findings of prior phasing research in which phasing is shown to result in substantial resource savings with minimal loss of derogatory information. In the small number of cases that were not expanded by DSS or by our evaluators in which Phase 2 sources would have been productive (four SSBI-PRs and two SSBI-PRs, respectively), the issue-relevant information that was missed was relatively minor. Findings of this study suggest that phasing operates effectively even when there is some level of disagreement as to which SSBI-PRs should be expanded. Phasing operated effectively when DSS investigators made the phasing decision (as in this study and in the DoD pilot test conducted in 2001) and also when different sets of evaluators made the phasing decision.

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Introduction

In the summer of 2002, the Deputy Assistant Secretary of Defense (Security and Information Operations), in conjunction with the Intelligence Community, approved a 1-year test of a two-phase Single-Scope Background Investigation—Periodic Reinvestigation (SSBI-PR). The phased SSBI-PR was subsequently implemented by DSS for all periodic reinvestigations conducted in FY03. The current study evaluates the performance of phasing as implemented by DSS.

Background

In 2001, a six-person team of experienced personnel security adjudicators and investigators reviewed 4,721 case files at four agencies routinely conducting or contracting out the Single-Scope Background Investigation—Periodic Reinvestigation (SSBI-PR): Department of Defense (DoD), Central Intelligence Agency (CIA), National Reconnaissance Office (NRO), and Office of Personnel Management (OPM). Information was gathered pertaining to Subjects' backgrounds and the seriousness and amount of information yielded by sources in these SSBI-PRs.

Analyses showed that some sources used in periodic reinvestigations are far more productive than others. Sources that yielded the greatest amounts of derogatory information were the same for the four organizations. The three most productive sources were the personnel security questionnaire, the subject interview, and the credit report. These three sources, when combined, yielded “issue-relevant information” in nearly all periodic reinvestigations in which any other sources yielded issue-relevant information. Issue-relevant information is information that is relevant to establishing an issue of potential current security concern. These three sources, together, identified 87% to 95% of SSBI-PRs with one or more items of issue-relevant information and identified 92% to 100% of cases upon which the organizations took administrative action.

The findings of this study, documented in *SSBI-PR Source Yield: An Examination of Sources Contacted During the SSBI-PR* (Kramer, Crawford, Heuer & Hagen, 2001), provided a starting point for designing an improved SSBI-PR process. Building upon the findings of the productivity of sources research, a second study was conducted to test the feasibility of a two-phase periodic reinvestigation.

The Two-Phase SSBI-PR

Using data gathered for the initial study, analyses were conducted to explore the feasibility of a two-phase SSBI-PR. In a phased reinvestigation not all sources are exploited in all cases. Phase 2 sources are used only when issue-relevant information is yielded by one or more Phase 1 sources, thereby suggesting that further investigation is warranted. The phasing approach is similar to medical screening where findings of initial tests determine if follow-up tests are appropriate. The SSBI-PR phasing model is illustrated in Figure 1.

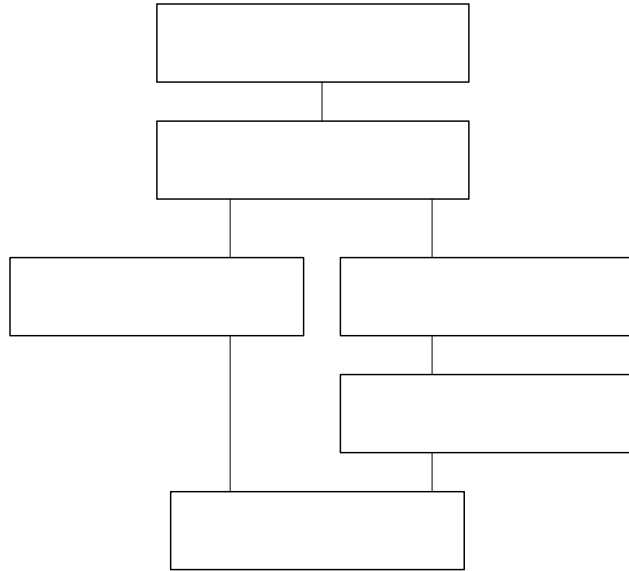


Figure 1 The Two-Phase SSBI-PR.

If Phase 1 sources do not yield issue-relevant information, the investigation is concluded. Thus, Phase 1 SSBI-PRs contain Phase 1 sources only. If Phase 1 sources yield issue-relevant information, the investigation is expanded to include Phase 2 sources. Thus, Phase 2 SSBI-PRs include both Phase 1 and Phase 2 sources (Figure 2).

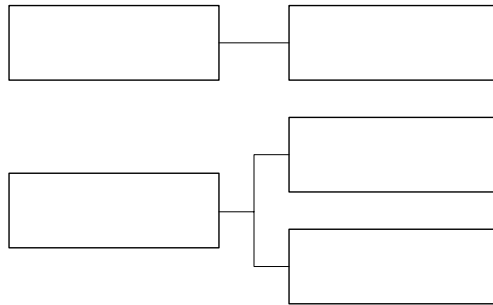


Figure 2 Sources Used in Phase 1 and Phase 2 SSBI-PRs.

In the initial phasing study, several different models were tested. In the optimal phasing model, Phase 1 sources included all sources currently used in the SSBI-PR except listed and developed references, residence interviews, and residence records. These sources are less productive in general and are especially unproductive in periodic reinvestigations in which no Phase 1 sources yield issue-relevant information (Kramer, Crawford, Heuer & Hagen, 2001).

Findings of the phasing analyses, documented in *A New Approach to the SSBI-PR: Assessment of a Phased Reinvestigation* (Heuer, Crawford, Kramer & Hagen, 2001), show that phasing saves substantial resources with minimal loss of derogatory information. Findings of the initial phasing study, a subsequent DoD pilot test of phasing (see

Heuer, Crawford, Kirkpatrick & Kramer, 2002), and independent analyses conducted by CIA and NRO showed phasing to be feasible for DoD, OPM, CIA, and NRO SSBI-PRs alike.

In the summer of 2002, the Deputy Assistant Secretary of Defense (Security and Information Operations), in conjunction with the Intelligence Community, approved a 1-year test of the phased SSBI-PR. The phased SSBI-PR was subsequently implemented by DSS for all periodic reinvestigations conducted in FY03.

Purpose of the Evaluation

In this evaluation, DSS' implementation of a phased SSBI-PR is assessed in five ways. We determined DSS' rate of case expansion (the percent of SSBI-PRs DSS designated as Phase 2) and compared this with the expansion rate found by our subject matter experts. We estimated the percentage of Phase 1 SSBI-PRs in which Phase 2 sources would have been productive had they been used in the original investigation. We documented the extent to which two experts with extensive investigative experience agreed with DSS' Phase 1 and Phase 2 designations, and examined the repercussions of the phasing decisions made by these evaluators. We estimated the resource savings that occurred as a result of DSS' implementation of phasing. Our primary research questions are shown in Table 1.

Table 1
Research Questions Answered to Evaluate DSS'
Implementation of a Phased SSBI-PR

1. What percentage of SSBI-PRs was expanded by DSS compared with our evaluators' case expansion rate?

2. In what percentage of Phase 1 SSBI-PRs (cases that DSS did not expand to include Phase 2 sources) would Phase 2 sources have yielded issue-relevant information if they had been used?^a

3. Of the SSBI-PRs that DSS did not expand to include Phase 2 sources, what percentage did our evaluators agree should not have been expanded?

4. Of the Phase 2 SSBI-PRs (cases that DSS expanded to include Phase 2 sources), what percentage did our case evaluators agree should have been expanded?

5. What reduction in resource requirements resulted from DSS' implementation of a phased SSBI-PR?

^aDSS conducted Phase 2 leads for our sample of Phase 1 investigations after the cases were closed so it would be possible to determine the number of cases in which Phase 2 sources would have yielded issue-relevant information if they had been used.

Methodology

Sample Characteristics

In FY03, DSS conducted a total of 15,668 SSBI-PRs under the phasing model. The rate at which DSS expanded SSBI-PRs was calculated using all FY03 cases, but only a sample of these cases were reviewed and coded by our evaluators to answer our other research questions.

From the subset of SSBI-PRs that DSS closed between October 1, 2002 and March 31, 2003 (n=2,233), DSS selected a random sample of 391 Phase 1 cases. DSS then conducted Phase 2 sources on these investigations so PERSEREC could determine whether Phase 2 sources would have yielded issue-relevant information if they had been used. Because these cases were designated as Phase 1 cases by DSS, Phase 2 sources would not normally have been included. DSS also provided PERSEREC with a convenience sample of 214 Phase 2 SSBI-PRs (cases in which both Phase 1 and Phase 2 sources were included in the investigation). Characteristics of the Phase 1 and Phase 2 SSBI-PR samples are shown in Table 2.

Table 2
Sample Characteristics
(n=605)

	<i>Phase 1 SSBI-PRs</i> <i>(n=391)</i>		<i>Phase 2 SSBI-PRs</i> <i>(n=214)</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<i>Age</i>				
17 – 30	64	16	47	22
31 – 40	159	41	79	37
41 – 50	98	25	58	27
51 – 60	61	16	22	10
61 or older	9	2	8	4
<i>Sex</i>				
Female	51	13	40	19
Male	340	87	174	81
<i>Employee Type</i>				
Contractor	99	25	97	45
Civilian	3	1	1	1
Military	289	74	116	54
<i>Citizenship</i>				
Born U.S. citizen	377	96	190	89
Born Abroad/US Parents	7	2	8	4
Naturalized	7	2	16	7

Data Collection

Efforts were made to ensure that data gathered for this study were of high quality. The two evaluators who reviewed and coded SSBI-PRs had over 60 years combined counterintelligence and investigative expertise. One evaluator worked in counterintelligence for the Department of the Army Inspector General for over 30 years while our other evaluator worked in counterintelligence for the Air Force Office of Special Investigations for over 30 years. Both individuals had 7 years of experience conducting background investigations at the time of our study.

Data Collection Software Program

Our evaluators gathered data from case files using a Microsoft Access[®] software program. The coding program was designed to minimize coder fatigue and to assure data completeness and accuracy. The data collection program notified our evaluators if required information was missing or if entries were inconsistent with the type or range of expected values. Materials that were used to train coders are shown in Appendix A.

The Coding Process

Phase 1 SSBI-PRs are those that DSS said did not contain issue-relevant information in Phase 1 sources. Phase 2 SSBI-PRs are cases that DSS investigators felt contained issue-relevant information in Phase 1 sources and which were therefore expanded to include Phase 2 sources.

The coding process entailed documenting the following for Phase 1 SSBI-PRs:

- Did Phase 1 sources yield issue-relevant information in the investigation? (In other words, did our evaluators agree with DSS' Phase 1 designation?)
- If Phase 1 sources yielded issue-relevant information, which sources yielded this information and what was the nature of this information?
- Did Phase 2 sources yield issue-relevant information? (In other words, if Phase 2 sources had been used, what issue-relevant information would they have yielded?)
- If Phase 2 sources yielded issue-relevant information, which sources yielded this information and what was the nature of this information?

The coding process entailed documenting the following for Phase 2 SSBI-PRs:

- Did Phase 1 sources yield issue-relevant information in the investigation? (In other words, did our evaluators agree with DSS' Phase 2 designation?)

- If Phase 1 sources did not yield issue-relevant information, what derogatory information was yielded by Phase 1 sources such that DSS decided to expand the investigation?
- Did Phase 2 sources yield issue-relevant information in the investigation? (While this information would not have been missed, as Phase 2 sources are used in Phase 2 investigations, we wanted to be able to estimate the productivity of Phase 2 sources in Phase 2 investigations.)
- If Phase 2 sources yielded issue-relevant information, what sources yielded this information and what was the nature of this information?

Sources Used in SSBI-PRs and Coded for This Study

As suggested above, sometimes sources were examined as a group and sometimes they were coded individually. In answering the general question “Did Phase 1 sources yield issue-relevant information in the investigation?” our evaluators examined all Phase 1 sources as a group. But in answering the more specific question “If Phase 1 sources yielded issue-relevant information, which sources yielded this information and what was the nature of this information?” our evaluators reviewed and coded sources individually. Sources used in SSBI-PRs and coded for this study are shown in Table 3.

Inter-Coder Reliability Assessment

To assess coding consistency, a test of inter-coder reliability was conducted. Each evaluator completed the same 10 SSBIs randomly selected from our sample of cases. Comparisons of coders’ responses, when coding the same 10 files, showed that they agreed in their coding decisions a relatively high percentage of the time. Their average level of agreement for all variables combined was 93%. Given that coding required that individual judgment be exercised in all coding decisions, this is a favorable level of inter-coder agreement (Landis & Koch, 1977; Shrout & Fleiss, 1979; Tinsley & Weiss, 1975). Details concerning the inter-coder reliability assessment, including our evaluators’ level of agreement for specific types of variables, are shown in Appendix B.

Table 3
Sources Used in SSBI-PRs and Coded for this Study^a

Phase 1 Sources

- Electronic Personnel Security Questionnaire
- Subject Interview
- Credit Report
- Education Records: transcripts, diplomas, transcripts, etc.
- Employment Interviews: interviews with Subject's current coworker or supervisor
- Employment Records: performance evaluations, work attendance records, letters of reprimand, etc.
- Ex-Spouse Interview: interview of former spouse/cohabitant
- Local Agency Checks (LAC): checks of records held by police departments, sheriff's departments, county courts, etc.
- Medical Interviews: interviews of therapists, social workers, psychiatrists, etc.
- Medical Records: case files, treatment records, etc.
- NAC/Subject: national agency checks for the Subject
- NAC/Spouse-Cohabitant: national agency checks for the Subject's spouse or cohabitant
- Other Interviews: confidential sources, security manager interviews, interviews not categorized elsewhere
- Other Records: military service records, public records (e.g., verifications of divorce, bankruptcy, other court actions), Title 31 records (large currency transaction reports), security records, and records not fitting any other records category

Phase 2 Sources

- Developed References: interviews of references who are developed through other interview sources
- Listed References: interviews of references listed on Subject's EPSQ
- Residence Interview: interviews of Subject's past or present neighbors
- Residence Records: lease agreements, rental records, etc.

^a Phase 1 and Phase 2 sources are distinguished based upon prior research in which this phasing model was found to be optimal. For more information about this phasing model, and results of phasing analyses conducted with SSBI-PRs, see *SSBI-PR Source Yield: An Examination of Sources Contacted During the SSBI-PR* (Heuer, Crawford, Kramer & Hagen, 2001).

Results

Percentage of SSBI-PRs Expanded by DSS

Using the expansion criterion of issue-relevant information in one or more Phase 1 sources (the expansion criterion used in earlier phasing studies), 2,341 (15%) of the 15,668 SSBI-PRs opened and closed between October 1, 2002 and September 30, 2003 were expanded by DSS. Conversely, 85% of these SSBI-PRs were deemed to contain no issue-relevant information in Phase 1 sources and thus were not expanded (Table 4).

Table 4
Percentage of SSBI-PRs Expanded by DSS
(*N=15,668*)

<i>Type of Investigation^a</i>	<i>SSBI-PRs</i>	
	<i>n</i>	<i>%</i>
<i>Phase 1</i>	13,327	85
<i>Phase 2</i>	2,341	15
<i>Total</i>	15,668	100

^a Phase 1 SSBI-PRs contain Phase 1 sources only. Phase 2 SSBI-PRs contain both Phase 1 and Phase 2 sources.

Our analyses showed that our evaluators would have expanded a very similar percentage of investigations, despite the fact that they would have expanded some SSBI-PRs that DSS did not expand, and would not have expanded some SSBI-PRs that DSS did expand (as analyses presented later in this report will show). Our evaluators would have expanded 16% of SSBI-PRs in comparison with DSS' expansion rate of 15%.

Percentage of Phase 1 SSBI-PRs Where Phase 2 Sources Yielded Issue-Relevant Information

In 387 of the 391 SSBI-PRs that DSS designated as Phase 1 investigations (but for which they subsequently conducted Phase 2 sources), Phase 2 sources would have yielded no issue-relevant information if they had been used (Table 5). Conversely, there were four SSBI-PRs that DSS designated as Phase 1 in which Phase 2 sources would have yielded issue-relevant information if they had been used (less than 1% of Phase 1 cases). (DSS conducted Phase 2 leads on the sample of Phase 1 cases after they were closed so we could determine if Phase 2 sources would have yielded issue-relevant information.)

Table 5
Percentage of Phase 1 SSBI-PRs Where Phase 2
Sources Yielded Issue-Relevant Information
(n=391)

<i>Phase 1 SSBI-PRs</i>	<i>Phase 2 Sources Would Have Yielded</i>	
	<i>No Issue-Relevant Information</i>	<i>Issue-Relevant Information</i>
391	387	4
100%	99%	<1%

The issue-relevant information that would have been yielded by Phase 2 sources in these four SSBI-PRs is described below. This information was considered by our evaluators to be of limited security significance.

- **Case 1**
Developed Reference: Revealed that Subject had recently married a citizen of the United Kingdom.
Listed Reference: Revealed that Subject is marrying a citizen of the United Kingdom.
Ex-Spouse Interview: Advised that Subject employed a nanny from Latvia for two periods while he was divorced. He kept contact with the nanny and had visited her in 2003 in Latvia. Subject told ex-spouse that he had previously been engaged to a woman from Russia but that the relationship ended several years ago.
- **Case 2**
Residence Interview: Neighbor mentioned Subject may have been behind on some bills, but thought it could be due to a mix-up in the mail.
- **Case 3**
Developed Reference: As a possible indicator of undue affluence, a developed reference indicated that Subject spends a lot of money.
- **Case 4**
Developed Reference: Reported hearing that Subject had participated in a program related to alcohol abuse while stationed in Japan.

Percent Evaluator Agreement with DSS’ Phase 1 Designation

Our evaluators felt that Phase 1 sources did not yield issue-relevant information in 370 of the 391 SSBI-PRs that DSS investigators designated as Phase 1, but would have expanded 21 SSBI-PRs that DSS did not expand. Thus, our evaluators agreed with DSS’ Phase 1 designation 95% of the time and disagreed with DSS’ Phase 1 designation 5% of the time (Table 6).

Table 6
Percent Evaluator Agreement with
DSS Phase 1 Designation^a

<i>Phase 1 SSBI-PRs According to DSS</i>	<i>Evaluator Agreed with Phase 1 Designation</i>	<i>Evaluator Disagreed with Phase 1 Designation</i>
391 100%	370 95%	21 5%

The issue-relevant information yielded by Phase 1 sources in 10 cases of the 21 SSBI-PRs that our evaluators would have expanded (but which DSS did not expand), is described below. Rather than describing the information for all 21 SSBI-PRs, ten exemplary cases are provided.

- **Case 1**
Credit Report: Showed two bad debts and three unpaid collections, totaling \$1,600 one year prior to investigation.
Subject Interview: Subject admitted to becoming financially overextended in use of credit cards.

- **Case 2**
Ex-Spouse Interview: Ex-spouse stated he had "nothing good" to say about Subject, and it would "be in her best interest if he were not interviewed."

- **Case 3**
EPSQ: Subject's spouse is a Malaysian citizen to whom he has been married since 1990. EPSQ showed travel to Malaysia by Subject and spouse to visit family.

- **Case 4**
Subject Interview: Subject admitted counseling for anxiety attacks and that he is currently taking psychotropic medications.

- **Case 5**
Credit Report: Credit report in connection with the ESPQ shows falsification of the report. Credit report also shows a pattern of financial irresponsibility.
EPSQ: Subject denied any delinquencies in excess of 180 days but credit report shows two recent collections/charge-offs totaling \$1,060.

- **Case 6**
EPSQ: Subject's wife is a German citizen. Subject listed annual travel to Germany. His four children are listed as German citizens.
Subject Interview: Subject reported that he has traveled to Germany annually for 4 weeks each time to visit his wife's relatives in Germany.

- **Case 7**
Subject Interview: Subject admitted mental health counseling for depression and taking Prozac for that condition.
- **Case 8**
Ex-Spouse Interview: Ex-spouse alleged 11 years of marital infidelity.
- **Case 9**
Public Records: Divorce records contain an allegation by his ex-spouse that the marriage dissolved because of excessive alcohol use and violence by Subject.
Subject Interview: Subject admitted drinking four to five beers once per week but denied having alcohol problems. Subject stated his ex-spouse was the daughter of an alcoholic and considered any alcohol use excessive. Subject stated the only violence in their marriage was due to his attempts to discipline his son who was a "problem child" and that the son also employed violence.
- **Case 10**
Credit Report: Subject has two credit reports. The first credit report showed personal debt of about \$45,000 and \$130,000 mortgage. The second credit report showed \$85,000 in debt with the same mortgage and several bad debts.

In expanding an additional 21 SSBI-PRs that DSS did not expand, our evaluators would have lowered DSS' misses by three cases. Three of the four cases that DSS designated as Phase 1, but in which Phase 2 sources would have been productive, would have included these sources if our evaluators had made the phasing decision. By expanding a slightly greater number of cases, our evaluators would have reduced the number of misses substantially. The one SSBI-PR that our evaluators would not have expanded in which Phase 2 sources would have yielded issue-relevant information is Case 1 immediately following Table 5.

Percent Evaluator Agreement with DSS' Phase 2 Designation

There were 42 SSBI-PRs that DSS designated as Phase 2 that our coders did not feel contained issue-relevant information in Phase 1 sources. Thus, our evaluators agreed with DSS' Phase 2 designation 80% of the time and disagreed with DSS' Phase 2 designation 20% of the time (Table 7).

Table 7
Percent Evaluator Agreement with
DSS' Phase 2 Designation^a
(n=214)

<i>Phase 2 SSBI-PRs According to DSS</i>	<i>Evaluator Agreed with Phase 2 Designation</i>	<i>Evaluator Disagreed with Phase 2 Designation</i>
214 100%	172 80%	42 20%

The derogatory information contained in Phase 1 sources in 10 cases of the 42 SSBI-PRs that DSS expanded, but which our evaluators would not have expanded, is described below. DSS felt the information was issue-relevant, but as our evaluators' remarks suggest, our evaluators did not concur. Rather than describing all 42 SSBI-PRs, 10 examples are provided.

- **Case 1**
Subject Interview: Subject's mother and brother in Barbados are not an issue.
- **Case 2**
Subject Interview: Subject's spouse is naturalized. Her Korean family is not an issue.
- **Case 3**
Subject Interview: Subject's ties to his brother and other relatives in Hungary are not grounds for an issue. Subject denies ability to be influenced, and has no financial or other bonds.
- **Case 4**
EPSQ: DUI in 1984 was previously adjudicated. No further information in current investigation. Not an issue.
- **Case 5**
LACs: Assault arrest in Arizona is clearly not the Subject in question. There was no match on name, SSN, date or place of birth, or location. No issue.
Subject Interview: Subject has siblings in India and UK, but no indications of close associations or contact. No issue.
- **Case 6**
Subject Interview: Subject received counseling for depression and marital issues for a few sessions. He took no medication and there is no continuing counseling. Marital situation was resolved. No issue of current concern.

- **Case 7**
Subject Interview: Subject reported involvement in a security incident as a witness, but clearly stated he was not held responsible or subject to adverse action. No issue.
- **Case 8**
Employment Interviews: Subject's supervisor reported a security violation which was not intentional and did not result in compromise.
Subject Interview: Subject has one security violation which was not intentional and did not result in compromise. This information should not have triggered Phase 2.
- **Case 9**
Subject Interview: Forgot to list one military exercise related travel to Korea during initial subject interview. This is completely irrelevant.
- **Case 10**
Subject Interview: Subject received stress management counseling after having a heart attack. Subject takes no medicine and demonstrates no failure to follow treatment. No issue.

Of the 42 SSBI-PRs that our coders would not have expanded to include Phase 2 sources, there was one in which Phase 2 sources did yield issue-relevant information. In this case a listed reference indicated that the Subject received mental health counseling for depression and was taking Prozac. The personnel security questionnaire (a Phase 1 source) indicated that the Subject received mental health counseling but only for marital purposes. Mental health counseling was not identified as a security issue in the subject interview either (another Phase 1 source). It is not possible to determine whether the listed reference, the Subject, or both the reference and the Subject provided accurate information. This case illustrates the importance that Phase 1 sources—especially the subject interview—be conducted effectively and written up in detail when warranted.

Reduction in Resource Requirements Resulting from DSS' Implementation of a Phased SSBI-PR

Using data gathered for a productivity study conducted by DSS (Mitchell, 1999), data gathered for the initial phasing study (Heuer, Crawford, Kramer & Hagen, 2001), and recent analyses conducted to estimate SSBI-PR time requirements (Crawford & Kramer, 2003), we estimated the reduction in resource requirements that resulted from DSS' implementation of a two-phase SSBI-PR in FY03.

Analyses based on 112,928 SSBI-PRs (Mitchell, 1999) showed listed reference interviews, developed reference interviews, and residence interviews (three of our four Phase 2 sources) to constitute approximately 42% of the total cost of conducting an SSBI-PR. (Cost data for residence records checks were unavailable and are therefore not

considered in our analysis.) When these cost data were gathered, however, SSBI-PR reference coverage requirements differed from those in place in FY03 at DSS.

In early 2002, reference requirements for SSBI-PRs were revised such that individuals could qualify as more than one type of reference if the Subject of the investigation knew the individual in more than one capacity. Analyses conducted for our initial phasing study suggest that this change resulted in a reduction of approximately 1.4 Phase 2 interviews per SSBI-PR. Whereas DoD conducted an average of 3.8 Phase 2 interviews in 2001 for each SSBI-PR, under a policy similar to that later enacted for DSS investigations, OPM conducted approximately 2.4 Phase 2 interviews per SSBI-PR (Heuer, Crawford, Kramer & Hagen, 2001, p. 19). This reduction in the number of Phase 2 sources used in SSBI-PRs has implications for the cost savings that resulted from the implementation of a phased SSBI-PR.

To update our cost figure of 42% to reflect the reduction in the number of Phase 2 interviews conducted on average (and the fact that the proportion of cost constituted by Phase 2 sources is reduced as a result), the original figure of 42% was multiplied by 63% (2.4 interviews divided by 3.8 interviews = .63) to arrive at estimated resource savings of 26% for each SSBI-PR that does not include Phase 2 sources.

Thus, in implementing phasing in FY03, DSS reduced resource requirements by 26% in the 85% of periodic reinvestigations they did not expand. This resulted in an overall reduction in resource requirements of conducting SSBI-PRs in FY03 of 22% (.85 multiplied by .26 = .22). That is to say, whatever the cost of conducting the 15,668 periodic reinvestigations in FY03 would have been without the implementation of phasing, in implementing a phased SSBI-PR, DSS reduced these resource requirements by 22%.

Table 8
Reduction in Resource Requirements Resulting from
DSS' Implementation of a Phased SSBI-PR

<i>Proportion of SSBI-PRs Not Expanded</i>	<i>Reduction in Resources for Each SSBI-PR Not Expanded</i>	<i>Total Resource Savings for the SSBI-PRs FY03</i>
85%	26%	22%

Conclusions and Recommendations

The findings of this evaluation support findings of previous phasing studies in which a two-phase SSBI-PR is shown to result in a substantial reduction in resource requirements with minimal loss of derogatory information. In the small number of SSBI-PRs that were not expanded by either DSS investigators or by our evaluators and in

which Phase 2 sources would have been productive if they had been used, the information that was missed was relatively minor.

Findings of the current study support previous research in which phasing is shown to offer tremendous benefits with minimal risk even when there is some level of disagreement as to when SSBI-PRs should be expanded. Phasing has operated effectively when DSS investigators have made the phasing decision (as in the current study and in the DoD pilot test conducted in 2001) and also when different sets of evaluators have made the phasing decision.

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Appendix A
Coder Training Materials

Appendix A

Coder Training Materials

A. Coding Program

A software program is used to code the SSBI-PRs in this study. For each investigation, one data entry screen is completed. This data entry screen is shown below.

Elements of the Data Entry Screen

- **Case #:** shows the case number (which should match the number at the top of the investigative file).
- **SSN:** shows the Social Security Number, which can be used as a cross-check against the SSN on the investigative file.

- **Case Type:** Shows either “Phase 1” or “Phase 2”. Case type affects the behavior of the issue description field for Phase 1 sources. Phase 1 cases will require that information be entered in the issue description field if the “Phase 1 Sources” radio box is checked “Yes” and Phase 2 cases will request information in the description field if the “Phase 1 Sources” radio box is checked “No”. Note that the label over the field will change depending on whether issue descriptions are required or an explanation of why there is no issue-relevant information is required.
- *****This Case is Not Complete***:** This message appears when the conditions for a case to be called complete have not been met. These conditions are the following: both radio boxes, Phase 1 Sources and Phase 2 Sources, have been checked either yes or no, and any visible issue description fields have at least 1 issue description.
- **Issue-Relevant Info in Phase 1 Sources? / Issue-Relevant Info in Phase 2 Sources?** Radio buttons are used to indicate whether Phase 1 sources or Phase 2 sources yielded issue-relevant information in the case.
- **Issue Description Fields:** These fields become visible depending on whether the case is a Phase 1 investigation or a Phase 2 investigation and whether you clicked “Yes” or “No” for “Issue-Relevant Info?” When the text boxes are visible, the program expects at least one record to be completed requiring the selection of a source type and a text description.
 - Deleting a source and text: A source type and text description may be deleted by clicking on the rectangle on the left side of the record. (In the screen shot above, the record with the “Ex-spouse Interview” has a small triangle in the rectangle, pointing at the “Source” label.) If there is information in the issue description boxes and a radio button setting is changed, the text fields will disappear and the program will ask you to delete the text related to the radio button. If the user confirms this deletion, the descriptions will be deleted permanently.
- **Show All Records:** This button makes all records accessible to the coder.
- **Show Incomplete Only:** This button makes accessible only those records for which the coder has not indicated that he or she is done with the case.
- **I’m done w/case:** When the “***This Case is Not Complete***” label is not visible the coder may check the “I’m done w/case” checkbox to indicate that coding for the case is complete. Note that this is not equivalent to the “***This Case is Not Complete***” label since it is possible that the conditions for having a complete case have been met, but there is still information in the case that needs to be recorded. Beware of the temptation to believe that a case has been completely coded just because the “***This Case is Not Complete***” label has disappeared.
- **This is a bad case:** This box may be checked at any time to indicate that the case contains insufficient information to code, or should be excluded for similar reasons.
- **Previous Record and Next Record:** these buttons have the same functionality as the record controls in the lower left corner.
- **Exit:** This button quits the program. (Coder does not need to save the data, this is done automatically.)

B. Coding Process

Phase 1 SSBI-PRs are those that DSS said *did not* contain issue-relevant information in Phase 1 sources, and thus would not have been expanded to include Phase 2 sources. (Because we wanted to know what issue-relevant information Phase 2 sources would have yielded in these cases, DSS conducted these leads after these investigations were closed. Even though Phase 2 leads wouldn't be used in Phase 1 cases in reality, we have both Phase 1 and Phase 2 leads for these investigations.)

Phase 2 SSBI-PRs are cases that DSS said **did** contain issue-relevant information in Phase 1 sources. DSS conducted both Phase 1 and Phase 2 leads on these cases also.

In evaluating DSS' implementation of phasing, this is our coding process:

Phase 1 SSBI-PRs

- Did Phase 1 sources yield issue-relevant information in the case?
If "No" additional coding is not required
If "Yes" the issue-relevant information is documented in the window that pops up.
- Did Phase 2 sources yield issue-relevant information in the case?
If "Yes" the information is documented.
If "No" additional coding is not required.

Phase 2 SSBI-PRs

- Did Phase 1 sources yield issue-relevant information in the case?
If "No" the derogatory information is documented and a rationale for why it is not issue-relevant information is provided.
If "Yes" additional coding is not required.
- Did Phase 2 sources yield issue-relevant information in the case?
If "Yes" the information is documented.
If "No" additional coding is not required.

As indicated, the coding process for Phase 2 sources in either type of investigation is the same: if information is there, it is documented; if no information exists, it is not documented. The difference is in the coding of Phase 1 sources. Wherever you disagree with DSS, the disagreement is documented.

C. Sources Containing Issue-Relevant Information

Sources are coded at the case level. If one or more sources of a type yields issue-relevant information in the investigation and the information is to be documented, the source is selected from the drop-down menu only once. Source categories that contain more than one lead type are shown below.

- **Local Agency Checks/Law Enforcement Checks** include Police Department Records and records pertaining to criminal behavior.
- **Other Interviews** include Security Manager Interviews, Self-Employment Interviews, Unemployment Interviews, and miscellaneous interviews not categorized elsewhere.

- **Other Records** include Security Records, Self Employment Records, Probation / Parole Records, Public Records, Unemployment Records, Court Records pertaining to civil processes, and miscellaneous records not categorized elsewhere.

Issue-relevant information is information that is relevant to establishing that an issue is of potential current security concern.

D. Criteria Used to Expand PRs by DSS

Examples of issue-relevant information are provided below. There are many kinds of derogatory information that will meet the threshold for issue-relevant information that are not listed.

1. Allegiance

An individual must be of unquestioned allegiance to the United States. Any information that suggests otherwise is issue-relevant information. Examples of issue-relevant information pertaining to Allegiance can include the following:

- Previous or current involvement (by admission or allegation) in any act of sabotage, espionage, treason, terrorism, sedition, or any other act whose aim it is to overthrow or alter the U.S. government or any of its states/subdivisions by unconstitutional means to include force or violence.
- Associating with or sympathizing with other persons or organizations that advocate or practice the above conduct.
- Association or sympathy with persons or organizations that advocate the overthrow of the U.S. Government
- Involvement in activities which unlawfully advocate or practice the commission of acts of force or violence to prevent others from exercising their rights under the Constitution of laws of the U.S. or of any state.

2. Foreign Influence

A security risk may exist when an individual's immediate family, including cohabitants, and other persons to whom he or she may be bound by affection, influence, or obligation (e.g., mothers, fathers, brothers, sisters, aunts, uncles) are not citizens of the United States or may be subject to duress. Any information that suggests that Foreign Influence is a potential security concern is issue-relevant information. Examples of issue-relevant information pertaining to Foreign Influence can include the following:

- An immediate family member, or a person to whom the individual has close ties of affection or obligation, is a citizen of, or resident or present in, a foreign country
- Subject's foreign background potentially causes him or her to have divided loyalty between his/her U.S. citizenship and loyalty

- As a general rule, close foreign relatives, friends, business interests, or travel by itself, is not issue-relevant information. Issue-relevant information is information that pertains to Subject's behavior, loyalty, or vulnerability to foreign influence.

3. Foreign Preference

When an individual acts in such a way as to indicate a preference for a foreign country over the United States, then he or she may be prone to provide information or make decisions that are harmful to the interests of the United States. Examples of issue-relevant information pertaining to Foreign Preference can include the following:

- The exercise of dual citizenship while a U.S. citizen (even if outside of period of investigation).
- Possession and/or use of a foreign passport while a U.S. citizen (even if outside of period of investigation).
- Military service or a willingness to bear arms for a foreign country while U.S. citizen (even if outside period of investigation).
- Accepting educational, medical, or other benefits from a foreign country while a U.S. citizen (even if outside period of investigation).
- Residence in a foreign country to meet citizenship requirements while a U.S. citizen (even if outside period of investigation).
- Using foreign citizenship to protect financial or business interests in another country while a U.S. citizen (even if outside period of investigation).
- Seeking or holding political office in a foreign country while U.S. citizen (even if outside period of investigation).
- Voting in foreign elections while U.S. citizen (even if outside period of investigation).
- Performing or attempting to perform duties, or otherwise acting, so as to serve the interests of another government in preference to the interests of the U.S. while U.S. citizen (even if outside period of investigation).

4. Sexual Behavior

Sexual behavior is a security concern if it involves a criminal offense, indicates a personality or emotional disorder, subjects the individual to coercion, exploitation, or duress, or reflects lack of judgment or discretion. Information pertaining to a Subject's sexual orientation or preference does not by itself constitute issue-relevant information. Examples of issue-relevant information pertaining to Sexual Behavior can include the following:

- Sexual behavior of a criminal nature whether or not Subject has been prosecuted
- Compulsive or addictive sexual behavior when the person is unable to stop a pattern of self-destructive or high-risk behavior or behavior which is symptomatic of a personality disorder.
- Sexual behavior that causes an individual to be currently vulnerable to coercion, exploitation, or duress.

- Sexual behavior of a public nature that reflects lack of discretion or judgment.

5. Personal Conduct

Conduct involving questionable judgment, untrustworthiness, unreliability, lack of candor, dishonesty, or unwillingness to comply with rules and regulations could indicate that the person may not properly safeguard classified information. Examples of issue-relevant information pertaining to Personal Conduct include, but are not limited to, the following:

- Refusal to cooperate with required security processing or to complete required security forms.
- Any falsification, dishonesty, and/or omission issue.
- Reliable unfavorable information provided by references that may be significant to assessing Subject's reliability or trustworthiness.
- Understatement of derogatory information.
- Behavior applies to all areas of Subject's life, to include the workplace.
- General behaviors: Lack of willingness to comply with rules, regulations and procedures; dysfunctional behavior such as problems controlling anger; malicious actions to get even; harassment or stalking; intimidation; shoplifting; behavior that resulted in the issuance of restraining order
- Work Behaviors: lying to cover up mistakes, petty theft, padding travel vouchers or expense accounts, serious misuse of government or company resources, and behaviors that in the military result in non-judicial punishment such as AWOL or conduct unbecoming an officer.

6. Financial Considerations

An individual who is financially overextended is at risk of having to engage in illegal acts to generate funds. Unexplained affluence is often linked to proceeds from financially profitable criminal acts. Examples of issue-relevant information pertaining to Financial Considerations can include the following:

- Debts currently 90 days or more overdue with a combined past due amount of \$2000 or more.
- Paid previously overdue accounts totaling \$2000 or more within the last two years.
- Bankruptcy action within the period of the investigations.
- Evidence of long-term, ongoing financial problems—even those that may exist from outside the current investigation period.
- Deceptive or illegal financial practices.
- Unexplained affluence such as paying off large debts, ownership of cars or boats outside of Subject's known ability to acquire, purchasing houses or property with no mortgage or loans, losing large sums by gambling with no apparent negative results, etc.

7. Alcohol Consumption

Excessive alcohol consumption often leads to the exercise of questionable judgment, unreliability, failure to control impulses, and increases the risk of unauthorized disclosure of classified information due to carelessness. Examples of issue-relevant information pertaining to Alcohol Consumption can include the following:

- Any (even one) alcohol-related arrest, charge, or conviction.
- Any (even one) admitted, developed, or alleged incident of illegal alcohol-related behavior that did not result in arrest.
- Any (even one) admitted, developed, or alleged use of alcohol at work (except lawful use specifically permitted by employer that did not result in binge drinking, fighting, impaired driving, loss of work, or other problems).
- Any (even one) admitted, developed, or alleged alcohol-related problem behavior dealing with family, friends, or neighbors (to include binge drinking, fighting, impaired driving, loss of work, or other problems).
- Admitted, developed, or alleged professional diagnosis and/or treatment for alcohol abuse or dependence.
- Admitted, developed, or alleged serious alcohol problem that has not been professionally treated (even if no alcohol problem currently exists).
- Any consumption of alcohol (admitted, developed or alleged) after professional diagnosis of alcohol dependence, and completion of rehabilitation program, even if the last *treatment* occurred outside the POI.
- Current attendance at Alcoholics Anonymous meetings is favorable information. It is not a basis for conducting Phase 2 if it is the result of a previous alcohol problem that has already been adjudicated when there is no indication of an alcohol problem within the scope of the SSBI. It is important to establish if the Subject ever continued to drink after a professional diagnosis of alcoholism or alcohol dependency.

8. Drug Involvement

Improper or illegal involvement with drugs raises questions regarding an individual's willingness or ability to protect classified information. Drug abuse or dependence may impair social or occupational functioning, increasing the risk of an unauthorized disclosure of classified information. Drugs are defined as mood and behavior altering substances and include drugs, materials, and other chemical compounds identified and listed in the Controlled Substances Act of 1970 (e.g., marijuana or cannabis, depressants, narcotics, stimulants, and hallucinogens), and inhalants and other similar substances. Drug abuse is the illegal use of a drug or use of a legal drug in a manner that deviates from approved medical direction. Examples of issue-relevant information pertaining to Drug Involvement can include the following:

- Frequent or recent use any narcotic, depressant, stimulant, hallucinogen, inhalant, cannabis, etc.
- Frequent or recent misuse of over-the-counter or prescription drugs.
- Illegal use or misuse of substances (narcotics, depressants, stimulants, hallucinogens, inhalants, cannabis, etc.) while employed as a law enforcement officer, prose-

utor, or courtroom official; while possessing a security clearance; or while in a position directly and immediately affecting the public safety.

- Involvement in the illegal purchase, manufacture, trafficking, production, transfer, shipping, receiving, or sale of any narcotic, depressant, stimulant, hallucinogen, or cannabis for own intended profit or that of another.
- Drug related felony arrest if sentenced to incarceration of more than one year, regardless of whether time was actually served.
- Professional diagnosis/evaluation of drug abuse/dependency; OR any involvement in a drug treatment program.

9. Emotional, Mental, and Personality Disorders

Emotional, mental, and personality disorders can cause a significant deficit in an individual's psychological, social, and occupational functioning. These disorders are of security concern because they may indicate a defect in judgment, reliability, or stability. A credentialed mental health professional (e.g., clinical psychologist or psychiatrist), employed by, acceptable to, or approved by the government, should be utilized in evaluating potentially disqualifying and mitigating information fully and properly, and particularly for consultation with the individual's mental health care provider. Examples of issue-relevant information pertaining to Emotional, Mental, and Personality Disorders can include the following:

- Any single report, whether or not confirmed and regardless of what the medical diagnosis may be, that Subject has demonstrated behavior that is or can be interpreted as emotionally unstable, dysfunctional, antisocial, high risk, violent, compulsive, paranoid, bizarre or other unusual or inappropriate behavior, that may indicate a psychological problem.
- Any single report, whether or not confirmed, that Subject has failed to follow treatment advice related to a diagnosed emotional, mental, or personality condition, e.g., failure to take prescribed medication.
- Any report that Subject is taking or has taken psychotropic medication for a mental health-related condition.

10. Criminal Conduct

A history or pattern of criminal activity creates doubt about a person's judgment, reliability, and trustworthiness. Examples of issue-relevant information pertaining to Criminal Conduct can include the following:

- Any information, whether confirmed, that Subject committed, was arrested for, was charged for, and/or was convicted of any (even one) criminal offense during the period of investigation, excluding routine traffic violations. This includes pending criminal charges and dropped charges. (See condition #2, below, for UCMJ offenses.)
- Courts martial or other disciplinary proceedings under the UCMJ, to include non-judicial, Captain's mast, etc.
- Discharge or dismissal from the Armed Forces under dishonorable, or less than honorable, conditions at any time in Subject's life.

- Criminal incidents, arrests, charges, and/or convictions outside the period of investigation.
- A person who has been convicted in a federal or state court, including courts martial, and sentenced to imprisonment for a term exceeding one year, or who was dishonorably discharged or dismissed from the U.S. armed forces, may not be granted or have renewed access to classified information.

11. Security Violations

Noncompliance with security regulations raises doubt about an individual's trustworthiness, willingness, and ability to safeguard classified information. Examples of issue-relevant information pertaining to Security can include the following:

- One or more security violations resulting in unauthorized disclosure (alleged or admitted) of classified or other protected information, if not previously adjudicated.
- One or more deliberate security violation(s), even if outside the period of investigation.
- Single or multiple security violation(s) due to negligence, a pattern of carelessness, or inattention to security procedures that is not deliberate and resulted in no unauthorized disclosure.
- One or more security violations resulting from Subject being under the influence of alcohol and/or drugs (prescribed or illegal).
- Any report, whether or not confirmed, or any CI indicator related to the secure handling of information, including:
 - Seeking information without need to know.
 - Deliberately revealing classified or other protected information to an unauthorized person.
 - Unauthorized or suspicious copying of classified or other protected materials, or keeping such materials at home or any other unauthorized location.
 - Lying about the destruction or other disposition of classified or other protected materials.

12. Outside Activities

Involvement in certain types of outside employment or activities is of security concern if it poses a conflict with an individual's security responsibilities and could create an increased risk of unauthorized disclosure of classified information. Examples of issue-relevant information pertaining to Outside Activities can include the following:

- Any service, whether compensated, volunteer or employment with a foreign country.
- Any service, whether compensated, volunteer or employment with any foreign national.
- Any service, whether compensated, volunteer or employment with a representative of any foreign interest.

- Any involvement with a foreign, domestic, or international organization or person engaged in analysis, discussion, or publication of material on intelligence, defense, foreign affairs, or protected technology.

13. Misuse Information Technology Systems

Noncompliance with rules, procedures, guidelines, or regulations pertaining to information technology systems may raise security concerns about an individual's trustworthiness, willingness, and ability to properly protect classified systems, networks, and information. Information Technology Systems include all related equipment used for the communication, transmission, processing, manipulation, and storage of classified or sensitive information. Examples of issue-relevant information pertaining to Misuse of IT Systems can include the following:

- Removal or duplication of any hardware, software, or media from an IT system without authorization (when specifically prohibited by rules, procedures, guidelines, or regulations).
- Introduction of hardware, software, or media into any IT system without authorization, when specifically prohibited by rules, procedures, guidelines, or regulations.
- Negligent or lax computer security habits that persist despite counseling by management.
- Repeated failure by a system administrator to implement or maintain standard IT security procedures that are required and available.
- Any information security violation, whether deliberate or negligent, that results in serious damage to the national security.

E. Sworn Statements are not available.

In all cases that reference a sworn statement, the Subject Interview is coded as issue-relevant.

F. Inter-Rater Reliability

Discussion of cases is encouraged, with the exception of the inter-rater reliability cases. Toward the beginning of the second week of coding, each of you should complete (or have completed) the following cases: 72, 102, 154, 268, 329, 541, 567, 626, 655, and 702. Because these cases were randomly selected from all cases, they are scattered throughout the files. Ed will automatically code cases 154, 268, 626 and 655 and Dan will automatically code cases 72, 102, 541 and 567 simply by coding the cases that were assigned. Cases 329 and 702 haven't been assigned to any coder yet.

Appendix B
Inter-Coder Reliability Assessment

Appendix B Inter-Coder Reliability Assessment

To assess coding consistency, a test of inter-coder reliability was conducted. Ten cases were randomly selected and were coded by each evaluator. Replicating the coding process for data collection, coders indicated whether a given case was “bad” or usable (incomplete cases were not coded), and if the case was usable, indicated whether issue-relevant information was present in Phase 1 and Phase 2 leads. When issue-relevant information was yielded by sources, depending upon the type of case and whether the sources were Phase 1 or Phase 2 sources, the evaluators indicated which sources yielded the information. Coders also documented the type of information that sources yielded by entering data into a text box, but their write-ups were not compared or included in our analysis of coder agreement.

For example, if Coder A coded a case as “bad” and Coder B also coded this case as “bad,” this counted as agreement. If Coder A indicated that a Phase 1 source yielded issue-relevant information in a case, and Coder B also indicated that a Phase 1 source yielded issue-relevant information in the case, this counted as agreement. If Coder A indicated that Phase 2 sources yielded issue-relevant information, and Coder B indicated that Phase 2 sources yielded no issue-relevant information, this counted as disagreement. Each of these variables was measured separately. For example, if Coder A called a case a “bad” case, and Coder B coded the case all the way through, our two coders would disagree on a number of variables for that file.

The extent to which coders agreed in their coding of sources for the 10 test files is shown in Table B.1. For example, of the 10 cases, coders agreed in their responses concerning Phase 1 sources 80% of the time. For Phase 1 and Phase 2 sources the coders’ average agreement was 90%. Given that coding required that individual judgment be exercised in all coding decisions, and that phasing performs well even when there is some disagreement among phasing decisionmakers, this is an acceptable level of inter-coder reliability (Landis & Koch, 1977; Shrout & Fleiss, 1979; Tinsley & Weiss, 1975).

Table B.1
Inter-Coder Reliability Assessment

<i>Source</i>	<i>Percent Agreement</i>
Phase 1 Sources Yielded Issue-Relevant Information	80%
Phase 2 Sources Yielded Issue-Relevant Information	100%
Bad Case	100%